Spin meeting minutes, 8/23/2006

Fanglei presented her progress on SPINK tracking. The test with single particle crossing the first intrinsic resonance 0+ν_y reveals that the Gaussian distribution was not defined with lattice function $\alpha \neq 0$. After the correction, the single particle tracking with different phases gives the same resonance strength. But the strength does not agree with DEPOL calculation yet. The lattice used in the tracking was with two partial snakes but the spin rotation was turned off. The synchrotron frequency check also shows difference between analytical solution and tracking results. Mei will provide the truly "old" code for the synchrotron motion part to compare.

Nick presented his work on the emittance growth at AGS injection. Leif asked if there is any way we can distinguish effect on IPM measurements between injection mismatch and linear coupling. Woody commented that these effects would be different if we have turn-by-turn IPM data. Anatoli suggested that we think about RHIC requirement to maintain luminosity and fight beam-beam. A round beam is preferred, not necessarily a small emittance beam. It is a legitimate and important question, but probably not the one Nick is trying to find the answer.

Haixin